

Amendments to the Claims:

1. (Currently Amended) ~~An apparatus~~ DNA transcriber for generating music, comprising:
 - a. ~~— a melodic sequence generator that is configured to receive a DNA nucleotide sequence and generate a melodic sequence in response to the received DNA nucleotide sequence; and b.~~
 - a. a harmonic sequence generator that is configured to receive a DNA nucleotide sequence, determine an amino acid that is defined by a three-segment DNA nucleotide sequence, and determine a chord in response to the defined amino acid, whereby a harmonic sequence is generated in response to a succession of defined amino acids; and
 - b. a melodic sequence generator that is configured to receive the nucleotide sequence and the chords generated from the determined amino acid sequence, and generate a melodic sequence of tones in response to the received nucleotide sequence within the dermined chords.
2. (Currently Amended) ~~The transcriber~~ apparatus of claim 1, further comprising a decoder that is configured to determine codons within the DNA sequence and synchronize the harmonic sequence generator in response to a determined codon.
3. (Currently Amended) ~~The transcriber~~ apparatus of claim 1, further comprising a music signal generator that is configured to receive the melodic sequence and the harmonic sequence and generate a music signal in response to the received melodic and harmonic sequences.
4. (Cancelled)
5. (Cancelled)

6. (Cancelled)
7. (Currently Amended) The ~~transcriber~~ apparatus of claim 1, wherein a root of each determined chord is determined in response to a particular chemical property of the determined amino acid. ~~the melodic sequence generator is further configured to receive the harmonic sequence and in response generate the melodic sequence~~
8. (Currently Amended) A method for musically transcribing DNA sequences, comprising:
 - a. determining a sequence of amino acids from ~~receiving a DNA~~ a sequence of nucleotides;
 - b. determining a sequence of chords ~~generating a melodic sequence~~ in response to the ~~received DNA~~ determined amino acid sequence;
 - c. ~~determining an amino acid that is associated with the received DNA sequence;~~
 - d. ~~determining a chord in response to the determined amino acid; and~~
 - c. generating a melodic sequence of tones in response to the nucleotide sequence encoding the amino acid of each determined chord; and a plurality of determined chords.
 - d. generating musical output comprising the determined chords and tones.
9. (Original) The method of claim 8, further comprising:
 - a. determining codons within the received DNA sequence; and
 - b. synchronizing the harmonic generator in response to the determined codons.

10. (Original) The method of claim 8, further comprising generating a music signal in response to the generated melodic and harmonic sequences.
11. (Original) The method of claim 10, wherein the music signal is an audio waveform.
12. (Original) The method of claim 10, wherein the music signal is a musical command sequence.
13. (Original) The method of claim 8, further comprising:
 - a. classifying the determined amino acid according to a chemical property of the determined amino acid; and
 - b. determining the chord in response to the classification of the amino acid.
14. (Original) The method of claim 8, wherein the melodic sequence is further generated in response to the determined amino acid.
15. (Currently Amended) A DNA transcriber for generating music, comprising:
 - ~~a. — means for generating a melodic sequence that is configured to receive a DNA sequence and generate a melodic sequence in response to the received DNA sequence; and b:~~
 - a. means for generating a harmonic sequence ~~generator~~ that is configured to receive a ~~DNA~~ nucleotide sequence, determine an amino acid that is defined by a three-segment ~~DNA~~ nucleotide sequence, and determine a chord in response to the defined amino acid, whereby a harmonic sequence is generated in response to a succession of defined amino acids; and

- b. means for generating a melodic sequence that is configured to receive the nucleotide sequence and the chords generated from the determined amino acid sequence, and generate a melodic sequence of tones in response to the received nucleotide sequence within the dermined chords.
- 16. (Cancelled)
- 17. (Currently Amended) A data carrier comprising the musical output of claim 8. ~~data generated by the transcriber of claim 1.~~
- 18. (Cancelled)
- 19. (Original) A consumer product comprising the data carrier of claim 17.
- 20. (Original) The consumer product of claim 19, wherein the product is a greeting card.
- 21. (Original) The consumer product of claim 20, wherein the greeting card is an e-card.
- 22. (Original) A method for comparing genetic sequences comprising:
 - a. generating a first and a second music sample using the method of claim 8;
 - b. comparing the first and second music samples;
 - c. generating an audible signal when the first and second music samples differ; and
 - d. correlating the audible signal with a difference in the compared genetic sequences.
- 23. (Cancelled)
- 24. (Cancelled)

25. (New) An apparatus comprising:
- a. a polynucleotide transcriber for receiving a polynucleotide sequence and determining therefrom a sequence of nucleotides and a sequence of amino acids wherein each amino acid is encoded by a triplet of said nucleotides;
 - b. a harmonic generator for selecting a chord in response to a chemical property of a first determined amino acid of said encoded amino acid sequence;
 - c. a melodic generator for selecting a first tone of the selected chord in response to a first nucleotide of the triplet encoding the first determined amino acid and for selecting a second tone of the selected chord in response to a second nucleotide of the triplet encoding the first determined amino acid; and
 - d. an output generator for generating musical commands in response to the selected chord and the selected tones.
26. (New) The apparatus of claim 25, wherein the chord comprises four tones, each tone being associated with a specific nucleotide.
27. (New) The apparatus of claim 25, wherein the melodic generator selects a third tone of the selected chord in response to a third nucleotide of the associated nucleotide triplet.
28. (New) The apparatus of claim 25, wherein the harmonic generator selects a subsequent chord in response to a chemical property of a subsequent amino acid.
29. (New) The apparatus of claim 25, wherein each triplet corresponds to one measure in the generated musical commands.
30. (New) The apparatus of claim 28, wherein each measure is in 3/4 time.